

In Re Application Of: David O. McGoveran	Examiner: Andre D. Boyce
Serial No. 09/476,711	Group Art Unit: 3623
Filed: Dec. 30, 1999	Atty. Docket No: McG-003
For: A Declarative Method	Date: Dec. 30, 2006

REMARKS

This replies to the Final Office Action mailed on August 18, 2006, a copy of which is enclosed. A Response After Final was sent but not accepted or entered by the Examiner. Claims 112-190 and 192 are pending in the application. The independent claims have been amended to meet the objections cited in the Final Office Action and to thus place the Claims in condition for allowance.

Claim Rejections under 35 USC §112

The Final Office Action rejects Claims 112-190 and 192 under 35 U.S.C. § 112, second paragraph, as failing to comply with the enablement requirement. This rejection is traversed for the reasons below.

The FOA asserted an objection that the “the claim(s) contain subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention”.

The first independent claim (Claim 112) now specifically incorporates the following three steps:

“(a) incorporating a dynamic pattern of operations into the first dynamic process;

(b) identifying at least a first set of real world conditions;

(c) determining that the first set of real-world conditions drives the first dynamic pattern of operations and causes at least a first behavioral pattern to emerge;”.

Each of these claims incorporates details that are stated in the Specification and suffice to meet this examination. Text and clauses in the new sub-paragraph (a) can be found throughout the Specification as part of the enabling paragraphs describing the invention and its implementation. See the following locations: Summary of the Invention, p. 10, 1st full ¶ (“incorporating”); Description of the Several Views of the Drawings, for Figure 2, p. 12, 1st full ¶; for Figure 4, p. 12, last ¶; Detailed Description of the Invention, p. 13, first ¶; definition of “Goal”, p. 15, first ¶; definition of “Condition”, p. 15, last ¶; definition of “Constraint”, p. 16, 2nd full ¶; p. 17, 3rd full ¶; (“dynamic process”); definition of “Action”, p. 16, first full ¶ (“dynamic operation”); p. 18, 3rd ¶ from bottom (“dynamic pattern of operations”). Text clauses in the new sub-paragraph (b) can be found in all of the following locations: Summary, p. 10, 1st ¶ (twice); Description of the Several Views of the Drawings, for Figure 2, p. 12, 3rd ¶ from bottom; Detailed Description of the Invention, p. 13, 2nd ¶ from bottom; p. 14, top ¶; definition of “Condition”, p. 15, last ¶; definition of “Constraint”, p. 16, 2nd full ¶; p. 21, first full ¶; p. 23, first full ¶; p. 24, top ¶; (“real world”); and Summary, p. 10, last full ¶ (twice); p. 11, first full ¶; p. 13, bottom ¶; definition of “Goal”, p. 15; p. 18, 2nd full ¶ (thrice) and last ¶; p. 21, first ¶; p. 23, 2nd full ¶; (“real-world”). Text clauses in the new sub-paragraph (c) can be found as above (for “real-world”, “real world”, and “dynamic pattern of operations”) and in Detailed Description of the Invention, p. 22, top ¶; (“behavior patterns to emerge”, in the plural). [The above Page and paragraph cites are to the Corrected Original Specification, dating from Oct. 2004 after the PTO deemed the prior submission to include “new matter”, and as paginated in the Attorney’s file.]

These new claim elements, and the Specification as a whole (including the drawings), constitute sufficient enabling detail to traverse this objection.

Claim Rejection Under 35 USC §101

The FOA also rejects Claims 112-190 and 192 under 35 U.S.C. §101, “because the claimed invention is directed to non-statutory subject matter”. Despite the continued appellate court rejections, as evidenced by both State Street Bank & Trust Co. v. Signature Financial Group 927 F. Supp. 502, 38 USPQ2d 1530 (D. Mass 1996), *rev'd*, 149 F.3d 1368, 47 USPQ2d 1596 (Fed. Cir. 1998); *cert. denied*, 525 U.S. 1093 (1999) and In Re Lundgren, the FOA asserted that the Applicant’s invention failed on the grounds that “[f]or a claimed invention to be statutory, the claimed invention must produce a useful, concrete, and tangible result” (Underlining added for emphasis). Yet there is absolutely no statutory support in 35 USC §101 for the second and third elements as any separate test, for the statutory language states explicitly and without modification only: “Whoever invents...any new and useful process....”

That these second and third elements, “concrete” and “tangible” were the grounds for the objection was made clear as the FOA asserted specifically that: “independent claims 112 and 192 provide no concrete result”; and that the claimed invention “produces no concrete result”.

It is axiomatic that a process itself cannot be concrete. (Unless perhaps it is a method for using Portland cement to produce a concrete; see the entry in Wikipedia for “Portland Cement”; or the method of burning ground limestone and clay together to produce Portland Cement, invented in 1824 by the English inventor Joseph Aspdin. See <http://inventors.about.com/library/inventors/blconcrete.htm>). Nor is a process itself necessarily tangible, though the means for implementing it may well be, as any newspaper press, petroleum cracking tower, or Bessemer blast furnace is.

Roget's Thesaurus gives "explicit" as a synonym for "concrete" and also for "tangible".
Roget's New Millennium™ Thesaurus, First Edition (v 1.3.1) © 2007 by Lexico

Publishing Group, LLC. (<http://thesaurus.reference.com/browse/tangible>). Two specific steps in the independent claim 112 satisfy this need. First, step (h) (formerly e) explicitly and specifically has the process making a change by: “modifying at least one Element of said dynamic process through the Action of at least a Rule whose Condition is triggered by at least one input from an event in the real world”. Also, step j (formerly m) explicitly and specifically has the process “executing automatically at least a subset of the dynamic pattern of operations that progresses towards said objective” Each of these, plus their combination, negate the unsupported assertion that “independent claims 112 and 192 produce no concrete result”.

Additionally Step (h), “modifying at least one Element” – and an “Element” is specifically defined as “any of a Goal, Rule, Rule Set, Condition, Action, Constraint, Measurable value, or Delegation” – satisfies the requirement of a “transformation of data” found in State Street Bank, *supra*. The usefulness of this transformation is specifically and concretely stated in the Specification (p. 19, top): “Process information is thereby made explicit rather than implicit and, because it is tied to measurement, susceptible to comparison and improvement.”

Such a modification is not only not “subjective”, as is mistakenly asserted in the FOA, but the antithesis of “subjective”, for this makes the process both explicit, and therefore, stated and reviewable; and tied to measurement, and therefore linked to an objective, external standard.

Furthermore, Roget’s Thesaurus gives the definition of "measurable" as "determinable", with synonyms "calculable" and "computable". The newly amended Claims 112 and 192, and all dependent claims, and therefore the invention as claimed, applies only to that portion of the disclosure that is concrete, tangible, and deterministic (using the latter specifically in the sense of ‘reproducible’). The FOA falsely concluded – without any citation, evidence, or reasoning – that the process is “subjective, whereby the result is neither assured nor repeatable” and that “the result cannot be assured or reproduced”; and objected to the claims on these grounds.

More than one sub-class and sub-field in the PTO Classification scheme (specifically, 706/ 12, 14 and 25) explicitly acknowledge that indeterminacy as to the precise order of operations, or of sub-steps, is not to be equated with “results [that] cannot be assured or reproduced”. As has been shown above, the disclosed invention is “measurable” – by an external standard, therefore negating any assertion that its nature is “subjective” – and also is “determinable” – therefore negating any assertion that its results cannot be assured or reproduced.

It is hard to see how any accusation that an invention is “subjective” can be made, let alone supported, for a Specification and claims that repeatedly recite in their text an implementation based on real world conditions (Claim 112, sub-step (c)), measurable efforts (Claim 112, sub-step (d)), a measurable value and real world source (Claim 112, sub-step (g)), and an event in the real world (Claim 112, sub-step (h)). Applicant concedes that if the real world changes, and thus the conditions which are measured by the Conditions in the process change, that the results that are produced might change. In fact, if those conditions trigger different rules and actions, the results will assuredly change. Yet the measurable, objective, and reproducible result is that the process’s results will continually match not some axiomatic assertions of preconceptions, but the reality of the real world. It is in fact this very assuredness and reproducibility that distinguishes the invention from the prior art; when the real world changes, the computer implementation adapts to the changes.

Finally, the FOA assertion that 35 USC §101 grounds exist due to the lack of any “useful” result, completely fails to acknowledge that the invention enables handling of logical contradictions – a problem that had not be solved in this field before. This useful result is described in the Specification and in the claims; with step (h) from Claim 112, “modifying”, further explicated in Claim 161 (disclosing an adaptation process), and even further explicated in Claim 167 (resolving a contradiction).

Additionally, all of the statements of the Response After Final, submitted Dec. 30, 2006, are herein explicitly incorporated by reference as further grounds for the traversal of the above objections. To spare the burden on the PTO and Examiner these pages have not been duplicated in this filing, as they are already before the PTO and in the file.

Conclusion

For all the reasons given above, it is respectfully submitted that the claims comply with the requirements of Sections 112 and 101 such that this invention attains at least one concrete, tangible, and useful result and is of patentable merit. Accordingly, Applicant requests that this amendment be entered and this application is now submitted to be in full condition for allowance, which action is respectfully solicited. Applicant requests a telephonic interview with the Examiner if the Examiner has any questions or believes that any issues remain respecting allowance of the application within two weeks of the filing of this reply.

Respectfully Submitted;

George S. Cole, Esq. PTO #40,563



EXPRESS MAIL CERTIFICATE

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I hereby certify that the following documents:

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- a copy of the Office Action;
- petition for extension of time, Response to the Office Action and Request for Continued Examination (RCE);
- payment for extension of time and RCE;
- Claims Listing;

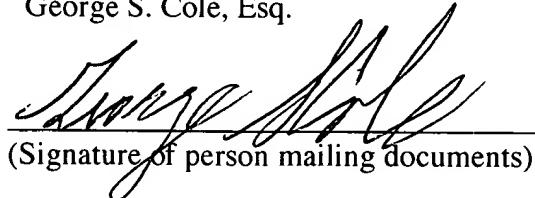
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Attn: Examiner Andre Boyce
Commissioner for Patents
P.O. Box 1450
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George S. Cole, Esq.



George S. Cole
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/476,711	12/30/1999	DAVID O. MCGOVERAN		8198
7590	08/18/2006		EXAMINER	
GEORGE S COLE 495 SEAPORT COURT SUITE 101 REDWOOD CITY, CA 94063			BOYCE, ANDRE D	
		ART UNIT	PAPER NUMBER	
		3623		

DATE MAILED: 08/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.



Office Action Summary

Application No.	Applicant(s)	
09/476,711	MCGOVERAN, DAVID O.	
Examiner	Art Unit	
Andre Boyce	3623	

— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 25 May 2006.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 112-190 and 192 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 112-190 and 192 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____

- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____

DETAILED ACTION

Response to Amendment

1. This Final office action is in response to Applicant's amendment filed May 25, 2006. Claims 112 and 192 have been amended. Claim 191 has been canceled. Claims 112-190 and 192 are pending.
2. The previously pending rejections to claims 112-192 under 35 U.S.C. 112, second paragraph, have been withdrawn.
3. Applicant's arguments filed May 25, 2006 have been fully considered but they are not persuasive.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
5. Claims 112-190 and 192 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Here, the result of the invention lacks concreteness, since the result is not assured and reproducible, as discussed below. As such, the

invention cannot be used as intended without undue experimentation, and is therefore not enabled.

Claim Rejections - 35 USC § 101

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claims 112-190 and 192 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

For a claimed invention to be statutory, the claimed invention must produce a useful, concrete, and tangible result. In order to be considered useful, the claimed invention must possess a specific, substantial, and credible utility. In order to be concrete, the result must be assured and reproducible. In order to be tangible, the invention must provide a real world result and must involve more than a manipulation of an abstract idea.

In the present case, independent claims 112 and 192 provide no concrete result. Claim 112 recites declaring and stating an objective, declaring and stating at least one objective rule set, delegating to at least one specific set of actors, determining the satisfaction of an rule's condition, modifying at least on element, etc. However, the claimed invention is merely a "reasoning paradigm," (i.e., theoretical approach/roadmap) as described by Applicant, and produces no concrete result. Moreover, this reasoning paradigm (i.e., claimed invention) is subjective, whereby the result is neither assured nor repeatable. Claims 113-190 are rejected based

upon the same rationale. Claim 192 recites means for accepting, comparing, delegating, determining, modifying, etc. However, these limitations provide no concrete result, since the result cannot be assured or reproduced, as discussed above.

Response to Arguments

8. In the Remarks, Applicant argues that the totality of claims 112 and 192, including executing automatically at least a subset of the dynamic pattern of operations that progresses towards said objective, and means for using said set of steps to further the attainment of a goal, respectively, effect a useful, concrete, and tangible result. The Examiner respectfully disagrees and submits that as discussed above, Applicant's limitations provide a reasoning paradigm that provides no concrete result, i.e., the result cannot be assured or reproduced. In addition, the affidavit of Professor Bidgoli makes no mention of the concreteness of the invention, and is, in any event, just one of many factors with respect to the Examiner's determination of whether the invention is statutory under 35 USC § 101.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andre Boyce whose telephone number is (571) 272-6726. The examiner can normally be reached on 9:30-6pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the

automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-
272-1000.

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August 7, 2006

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